

Single Reader Interface Module



Overview

The RSC-1 is a single-reader interface module designed to connect a single door in the DNA Fusion™ access control system. The RSC-1 supports interfacing 1 card reader, 2 general purpose inputs and 2 relay outputs to any Open Options intelligent controller. A single entry/exit door application (2 readers total) are supported when connected to OSDP readers. The Series 3 RSC-1 has the same reliable interface and footprint as the Series 2 modules, enabling seamless upgrades for existing deployments.

When connected to an Open Options intelligent controller, the RSC-1 can relate the activities of selected system devices to other devices within the system, generating actions and allowing activities to occur independent of the host. The RSC-1 can also locally process access requests based on facility code verification, even when disconnected from an intelligent controller.

RSC-1

(Mercury MR50 - Series 3)

Features

- 12 or 24 VDC power
- One reader port - supports Data1/Data0, Clock/Data, Supervised and Unsupervised F2F and OSDP compatible RS-485 readers and keypads
- 2 programmable inputs w/optional supervision
- 2 Form-C relay outputs (fail-safe or fail-secure)
- Downloadable firmware
- Bicolor or 2-wire reader status LED support
- Dedicated tamper circuit
- Support for offline reader access mode
- On-board jumper for EOL termination
- DIP switch-selectable addressing
- Compatible with current and previous versions of DNA Fusion™

Benefits

- **Open Architecture:** Mercury high performance, reliable open hardware platform
- **OSDP Protocol:** Supports OSDP and Secure Channel protocol for device connectivity, file transfer and extended applications such as biometrics and FICAM profile support
- **Enhanced Security:** Embedded crypto memory chip provides secured layer of encryption to protect sensitive data (AES 128-bit or 256-bit)

RSC-1 Single Reader Interface

Specification

Primary Power	12-24 Vdc +/- 10%, 150mA maximum
Host Comm	RS-485, 2-wire, 4,000' (twisted pair with shield, Belden 9841)
Reader Ports	1 Reader Port*
Card/Keypad Data	OSDP, Clock/Data, Data-1/Data-0, RS-485, or F/2F
Keypad	8-bit Mercury, 8-bit Dorado/HID, 4-bit HID
Reader Power	Input voltage pass-through
LED	One-wire bi-color LED or two-wire LED
Buzzer	Only with 'one-wire' LED
Inputs	2 General Purpose: Programmable circuit type 1 Dedicated: Tamper
Output Relays	Relay 1: Normally open (NO): 5A @ 30 Vdc resistive Relay 1: Normally closed (NC): 3A @ 30 Vdc resistive Relay 2: 2A @ 30 Vdc resistive
Dimensions	2.75" L x 4.25" W x 1.0" H, (70mm L x 108mm W x 25.4mm H)
Temperature	-40-70 °C operational, -55-85 °C storage
Humidity	5 to 95% RHNC
Standards	UL 294 recognized, CE compliant, RoHS, FCC Part 15 Subpart B

*Note: A single entry/exit door application (2 readers total) is supported when connected to OSDP readers.

Application

